

APPENDIX C


(CLEAN VERSION OF ALL PENDING CLAIMS)

(Serial No. not yet assigned)


CLAIMS

What is claimed is:

1. (Twice Amended) A chip-scale package comprising:

 a semiconductor die having an active surface having at least one bond pad thereon;
at least one conductive trace spaced from said at least one bond pad and having an upper surface and a lower surface, the lower surface of said at least one conductive trace substantially non-conductively attached to a portion of the active surface of said semiconductor die;
at least one discrete conductive bond connecting the at least one conductive trace to the at least one bond pad on the active surface of said semiconductor die;
at least one carrier bond attached to the upper surface of the at least one conductive trace; and
an encapsulant material encapsulating said semiconductor die, the at least one conductive trace, the at least one discrete conductive bond and a portion of the at least one carrier bond, the at least one carrier bond having another portion extending beyond said encapsulant material.

2. (Three Times Amended) A chip-scale package comprising:

 a semiconductor die having an active surface having a plurality of bond pads thereon;
a dielectric element having an upper surface and a lower surface, the lower surface of said dielectric element attached to a portion of the active surface of said semiconductor die;
a plurality of conductive traces spaced from said plurality of bond pads, each trace of the plurality of conductive traces having an upper surface and a lower surface, the lower surface of each trace of said plurality of conductive traces attached to a portion of the upper surface of said dielectric element for connecting each conductive trace of said plurality of conductive traces to the active surface of said semiconductor die;
a plurality of discrete conductive bond members, at least one discrete conductive bond member of the plurality of conductive bond members connecting each conductive trace of said plurality of conductive traces to at least one bond pad of the plurality of bond pads on the active surface of said semiconductor die;
a plurality of conductive carrier bonds, at least one carrier bond of the plurality of conductive carrier bonds disposed on the upper surface of each conductive trace of said plurality of

conductive traces; and

an encapsulating material disposed about at least portions of said semiconductor die, said dielectric element, said plurality of conductive traces, said plurality of discrete conductive bond members and a portion of each carrier bond of said plurality of conductive carrier bonds.

3. A chip-scale package as in claim 2, wherein said dielectric element includes an adhesive-coated polyimide tape.

4. A chip-scale package as in claim 2, wherein said dielectric element includes a polyimide film.

5. A chip-scale package as in claim 2, wherein the upper surface and lower surface of said dielectric element are attached respectively to a portion of the lower surface of each conductive trace of said plurality of conductive traces and a portion of the active surface of said semiconductor die connecting portions of said plurality of conductive traces and portions of said semiconductor die.

6. (Previously Amended) A chip-scale package as in claim 2, wherein said plurality of conductive traces comprises a plurality of lead fingers.

7. (Previously Amended) A chip-scale package as in claim 2, wherein said plurality of conductive traces comprises a conductive metal.

8. (Twice Amended) A chip-scale package as in claim 2, wherein said plurality of discrete conductive bond members comprises a conductive metal.

9. (Twice Amended) A chip-scale package as in claim 2, wherein said plurality of discrete conductive bond members comprises bond wires.

10. A chip-scale package as in claim 9, wherein said bond wires comprise gold or aluminum.

D4 11. (Twice Amended) A chip-scale package as in claim 2, wherein said plurality of discrete conductive bond members comprises TAB bonds.

12. (Twice Amended) A chip-scale package as in claim 2, wherein said plurality of discrete conductive bond members comprises thermocompression bonds.

13. (Previously Amended) A chip-scale package as in claim 2, wherein said plurality of conductive carrier bonds includes metal.

14. (Previously Amended) A chip-scale package as in claim 2, wherein said plurality of conductive carrier bonds comprises a conductive or conductor-filled polymer.

15. (Previously Amended) A chip-scale package as in claim 2, wherein said plurality of conductive carrier bonds is selectively located on the upper surface of said plurality of conductive traces forming an array.

16. (Previously Amended) A chip-scale package as in claim 2, wherein said plurality of conductive carrier bonds comprises solder balls.

17. A chip-scale package as in claim 2, wherein said encapsulating material comprises a substantially non-conductive material.

18. A chip-scale package as in claim 2, wherein said encapsulating material comprises a material having a low modulus of elasticity.

19. (Previously Amended) A chip-scale package as in claim 2, wherein each conductive carrier bond of said plurality of conductive carrier bonds further comprises an upper portion and a lower portion, said lower portion of a conductive carrier bond attached to the upper surface of a conductive trace of said plurality of conductive traces.

20. (Previously Amended) A chip-scale package as in claim 19, wherein said encapsulating material is disposed about the lower portions of said plurality of conductive carrier bonds.